Clean Version Of The Pending Claims Under 37 C.F.R. 1.121(c)(3):

Claims 1-81, now pending, are submitted below in accordance with 37 C.F.R. §1.121(c)(3), which presents a clean version of the entire set of pending claims in this single amendment paper.

1.   A method of encoding a source image, the method comprising:

generating a base layer representing a low-resolution portion of the source image, wherein the base layer has an associated aspect ratio; and

generating an enhancement layer representing a high-resolution portion of the source image, wherein the enhancement layer has an associated aspect ratio, and wherein the aspect ratio associated with the enhancement layer differs from the aspect ratio associated with the base layer.

2.   A method as recited in claim 1 wherein the aspect ratio associated with the base layer corresponds to an aspect ratio associated with low-resolution televisions.

3.   A method as recited in claim 1 wherein the aspect ratio associated with the enhancement layer corresponds to an aspect ratio associated with high-resolution televisions.

4.   A method as recited in claim 1 wherein the aspect ratio associated with the base layer is 4:3.

5.   A method as recited in claim 1 wherein the aspect ratio associated with the enhancement layer is 16:9.

6.   A method as recited in claim 1 wherein the step of generating a base layer includes low-pass filtering the source image.

7.   A method as recited in claim 1 wherein the step of generating an enhancement layer includes subtracting a portion of the base layer from a corresponding portion of the source image.

8.   A method as recited in claim 1 wherein the step of generating an enhancement layer includes:

extracting a first image from the base layer, wherein the aspect ratio of the first image differs from the aspect ratio of the base layer;

extracting a second image from the source image, wherein the aspect ratio of the second image matches the aspect ratio of the first image; and

subtracting the first image from the second image.

9.   A method as recited in claim 8 wherein the aspect ratio of the first image matches an aspect ratio associated with high-resolution televisions.

10.   A method as recited in claim 8 further including determining a vertical offset value, wherein the vertical offset value indicates the location from which the first image is extracted from the base layer.

11. A method as recited in claim 8 further including determining a horizontal offset value, wherein the horizontal offset value indicates the location from which the first image is extracted from the base layer.

12. A method as recited in claim 1 wherein the step of generating an enhancement layer includes high-pass filtering the source image.

13. A method as recited in claim 1 further including combining the base layer and the enhancement layer into a single transport stream.

14. A method as recited in claim 1 further including transmitting the base layer and the enhancement layer to an image decoding system.

15. A method as recited in claim 1 further including transmitting only the base layer to an image decoding system.

16. A method as recited in claim 1 further including transmitting the base layer to an image decoding system using a first transmission medium and transmitting the enhancement layer to the image decoding system using a second transmission medium.

17. A method as recited in claim 1 further including transmitting the base layer to an image decoding system using a first transmission format and transmitting the enhancement layer to the image decoding system using a second transmission format.

18. A method as recited in claim 1 further including storing the base layer and the enhancement layer on a storage medium.

19. A method as recited in claim 1 further including storing the base layer on a first storage medium and storing the enhancement layer on a second storage medium.

20. One or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 1.

21. A method comprising:

decoding a first layer representing a low-resolution portion of an encoded image, wherein the first layer has an associated aspect ratio; and

decoding a second layer representing a high-resolution portion of the encoded image, wherein the second layer has an associated aspect ratio, and wherein the aspect ratio associated with the second layer differs from the aspect ratio associated with the first layer.

22.   A method as recited in claim 21 wherein the aspect ratio associated with the first layer corresponds to an aspect ratio associated with low-resolution televisions.

23.   A method as recited in claim 21 wherein the aspect ratio associated with the second layer corresponds to an aspect ratio associated with high-resolution televisions.

24.   A method as recited in claim 21 wherein the aspect ratio associated with the first layer is 4:3.

25.   A method as recited in claim 21 wherein the aspect ratio associated with the second layer is 16:9.

26.   A method as recited in claim 21 wherein the first layer is a base layer.

27.   A method as recited in claim 21 wherein the second layer is an enhancement layer.

28.   A method as recited in claim 21 further including communicating the first layer to a low-resolution television.

29. A method as recited in claim 21 further including combining the second layer and a portion of the first layer to generate high-resolution image data.

30. A method as recited in claim 21 wherein the method is executed by a television.

31. A method as recited in claim 21 wherein the first layer is decoded from a physical medium and the second layer is decoded from a received data stream.

32. A method as recited in claim 21 further including correcting an anamorphic squeeze in the first layer.

33. A method as recited in claim 21 wherein the first layer is received at a first time and the second layer is received at a second time.

34. A method as recited in claim 21 wherein the first layer is received from a first media and the second layer is received from a second media.

35. One or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 21.

36. A method comprising:

transmitting a base layer representing a low-resolution portion of an image, wherein the base layer has an associated aspect ratio; and

transmitting an enhancement layer representing a high-resolution portion of the image, wherein the enhancement layer has an associated aspect ratio, and wherein the aspect ratio associated with the enhancement layer differs from the aspect ratio associated with the base layer.

37. A method as recited in claim 36 wherein the aspect ratio associated with the base layer corresponds to an aspect ratio associated with low-resolution televisions.

38. A method as recited in claim 36 wherein the aspect ratio associated with the enhancement layer corresponds to an aspect ratio associated with high-resolution televisions.

39. A method as recited in claim 36 wherein the base layer is transmitted using a first transmission medium and the enhancement layer is transmitted using a second transmission medium.

40. A method as recited in claim 36 wherein the base layer is transmitted using a first transmission format and the enhancement layer is transmitted using a second transmission format.

41. One or more computer-readable memories containing a computer program that is executable by a processor to perform the method recited in claim 36.

42. An apparatus comprising:

a base layer generator to generate a base layer having a first aspect ratio, wherein the base layer represents a low-resolution portion of an image; and

an enhancement layer generator coupled to the base layer generator to generate an enhancement layer having a second aspect ratio, wherein the enhancement layer represents a high-resolution portion of the image, and wherein the first aspect ratio differs from the second aspect ratio.

43. An apparatus as recited in claim 42 wherein the base layer generator is a low-pass filter.

44. An apparatus as recited in claim 42 wherein the enhancement layer generator is a high-pass filter.

45. An apparatus as recited in claim 42 wherein the enhancement layer generator includes an image extractor to extract a portion of the base layer and a differencing module to subtract the extracted portion of the base layer from a corresponding portion of the image.

46.   An apparatus as recited in claim 42 further including a transmitter coupled to the base layer generator and the enhancement layer generator, wherein the transmitter combines the base layer and the enhancement layer into a single transport stream.

47.   An apparatus as recited in claim 42 further including a transmitter coupled to the base layer generator and the enhancement layer generator, wherein the transmitter transmits the base layer and the enhancement layer to an image decoding system.

48.   An apparatus as recited in claim 42 further including a transmitter coupled to the base layer generator, wherein the transmitter that transmits only the base layer to an image decoding system.

49.   An apparatus as recited in claim 42 further including a storage medium coupled to the base layer generator and the enhancement layer generator, wherein the storage medium stores the base layer and the enhancement layer.

50.   An apparatus comprising:

a base layer decoder to decode a base layer representing a low-resolution portion of an image, wherein the base layer has an associated aspect ratio; and

an enhancement layer decoder coupled to the base layer decoder to decode an enhancement layer representing a high-resolution portion of an image, wherein the enhancement layer has an associated aspect ratio that differs from the aspect ratio associated with the base layer.

51.   An apparatus as recited in claim 50 wherein the aspect ratio associated with the base layer corresponds to an aspect ratio associated with low-resolution televisions.

52.   An apparatus as recited in claim 50 wherein the aspect ratio associated with the enhancement layer corresponds to an aspect ratio associated with high-resolution televisions.

53.   An apparatus as recited in claim 50 wherein the apparatus is a television.

54.   An apparatus as recited in claim 50 further including a receiver coupled to the base layer decoder and the enhancement layer decoder, wherein the receiver is to receive a transport stream containing a base layer and an enhancement layer.

55.   One or more computer-readable media having stored thereon a computer program comprising the following steps:

generating a first layer representing a low-resolution portion of a source image, wherein the first layer has an associated aspect ratio; and

generating a second layer representing a high-resolution portion of the source image, wherein the second layer has an associated aspect ratio, and wherein the aspect ratio associated with the second layer is different from the aspect ratio associated with the first layer.

56.   One or more computer-readable media as recited in claim 55 wherein the aspect ratio associated with the first layer is 4:3.

57.   One or more computer-readable media as recited in claim 55 wherein the aspect ratio associated with the second layer is 16:9.

58.   One or more computer-readable media as recited in claim 55 wherein the first layer is a base layer.

59.   One or more computer-readable media as recited in claim 55 wherein the second layer is an enhancement layer.

60.   One or more computer-readable media as recited in claim 55 wherein the step of generating a second layer includes comparing a portion of the first layer with a corresponding portion of the source image.

61. One or more computer-readable media as recited in claim 55 further including transmitting the first layer and the second layer to an image decoding system.

62. One or more computer-readable media as recited in claim 55 further including transmitting only the first layer to an image decoding system.

63. One or more computer-readable media as recited in claim 55 further including storing the first layer on a storage medium.

64. One or more computer-readable media as recited in claim 55 further including storing the second layer on a storage medium.

65. One or more computer-readable media having stored thereon a computer program comprising the following steps:

decoding a base layer representing a low-resolution portion of an encoded image, wherein the base layer has a first aspect ratio; and

decoding an enhancement layer representing a high-resolution portion of the encoded image, wherein the enhancement layer has a second aspect ratio, and wherein the first aspect ratio is different from the second aspect ratio.

66. One or more computer-readable media as recited in claim 65 wherein the first aspect ratio is 4:3.

67. One or more computer-readable media as recited in claim 65 wherein the second aspect ratio is 16:9.

68. One or more computer-readable media as recited in claim 65 further including communicating the base layer to a low-resolution television.

69. One or more computer-readable media as recited in claim 65 further including communicating the base layer and the enhancement layer to a high-resolution television.

70. A method of encoding a source image, the method comprising:

generating a base layer representing a low-resolution portion of the source image, wherein the base layer has an associated aspect ratio; and

generating an enhancement layer representing a high-resolution portion of the source image, wherein the enhancement layer has an associated aspect ratio, wherein the aspect ratio associated with the enhancement layer differs from the aspect ratio associated with the base layer, and wherein both the base layer and the enhancement layer are used to generate a high-resolution image.

71. A method as recited in claim 70 wherein the aspect ratio associated with the base layer corresponds to an aspect ratio associated with low-resolution televisions.

72.   A method as recited in claim 70 wherein the aspect ratio associated with the enhancement layer corresponds to an aspect ratio associated with high-resolution televisions.

73.   A method comprising:

decoding a first layer representing a low-resolution portion of an encoded image, wherein the first layer has an associated first aspect ratio;

decoding a second layer representing a high-resolution portion of the encoded image, wherein the second layer has an associated second aspect ratio, and wherein the second aspect ratio differs from the first aspect ratio; and

combining the second layer and the first layer to generate high-resolution image data.

74.   A method as recited in claim 73 further comprising communicating the first layer to a low-resolution television.

75.   A method as recited in claim 73 further comprising communicating the high-resolution image data to a high-resolution television.

76.   A method as recited in claim 1 wherein both the base layer and the enhancement layer are used to generate a high-resolution image.

77.   A method as recited in claim 1 wherein the enhancement layer contains only the high-resolution portion of the source image.

78.   A method as recited in claim 21 wherein both the first layer and the second layer are used to generate high-resolution image data.

79.   A method as recited in claim 21 wherein the second layer contains only high-resolution image data.

80.   A method as recited in claim 36 wherein both the base layer and the enhancement layer are used to generate high-resolution image data.

81.   A method as recited in claim 50 wherein both the base layer and the enhancement   layer   are   used   to   generate   high-resolution   image   data.